REMARKS

Following entry of this Amendment, claims 1-20 and 22-40 will be pending in the present application. Claim 19 has been amended and claim 21 has been cancelled hereby. The Examiner has indicated that the subject matter of claims 4, 10-16 and 21 is allowable. No claims have been allowed.

The specification of the present application has also been amended hereby. More specifically, the usage of the terms "upstream" and "downstream" in the specification has been corrected. When viewing the disclosure as a whole, it is clear that the use of the terms "downstream" and "upstream" which have been corrected hereby had been inadvertantly reversed and the clerical correction made hereby introduces no new matter. For example, the changes to the paragraph beginning at page 14, line 11, simply conform that paragraph to the structure of the apparatus being discussed to that depicted in Figure 3.

The Examiner has rejected claims 28-40 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. More specifically, the Examiner states that he "sees no antecedent basis in the disclosure for providing a booster fluid downstream of the blower." Claim 28 calls for a method of conveying and vacuuming fibrous insulation that includes, in relevant part, "providing an air flow stream downstream of a blower and an air vacuum stream upstream of said blower". As a general rule, a person can provide an air flow stream downstream of a blower and an air vacuum stream upstream of that same blower as called for in this clause of claim 28 simply by the operation of a conventional blower. The specification of the present application does provide a written description of such a blower as exemplified at page 12, line 22 to page 13, line 7, where blower 52 is discussed and Figure 3 illustrating blower 52, air duct 58 and vacuum duct 150. Claim 28 does not call for providing a booster fluid downstream of the blower and, thus, no written description of such a booster fluid is required in the specification. For these reasons, the withdrawal of the Examiner's rejection of claims 28-40 under 35 U.S.C. § 112, first paragraph, is respectfully requested.

The Examiner has rejected claims 28-40 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. More specifically, the Examiner argues that it is unclear in what way the applicant is providing an additional positive air flow downstream of the blower. As

discussed above, claim 28 calls for "providing an air flow stream downstream of a blower and an air vacuum stream upstream of said blower". Claim 28 does not call for providing any additional air flow downstream of the blower. Thus, the withdrawal of the Examiner's rejection of claims 28-40 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

The Examiner has rejected claims 1, 2, 5-8, 17-19 and 22-27 under 35 U.S.C. § 103(a) as being unpatentable over (1) Gerber (U.S. Pat. No. 6,364,579) in view of Zlotos (U.S. Pat. No. 6,588,988); (2) Gerber (U.S. Pat. No. 6,364,579) in view of Gerber et al. (U.S. Pat. No. 6,092,747); and (3) Gerber (U.S. Pat. No. 6,364,579) in view of Toyota et al. (U.S. Pat. No. 5,487,624).

Claims 1, 2, 5-8, 17-19 and 22-27 include three independent claims, i.e., claims 1, 19 and 28, which are addressed separately below.

Claim 1, and those claims depending therefrom, all call for a method of conveying fibrous insulation material that includes the steps of providing an air flow stream, selectively introducing fibrous insulation material into the air flow stream whereby the material can be selectively conveyed for application as insulation, sensing the actual air flow stream velocity, and comparing the actual air flow stream velocity with a desired air stream velocity and selectively adjusting the air flow stream in response to a differential between the actual and the desired air flow stream velocities.

None of the references, or combinations thereof, cited by the Examiner disclose or suggest such a method of conveying fibrous insulation which includes "sensing the actual air flow stream velocity." When rejecting the claims, the Examiner cites Zlotos '988 for disclosing the use of a pressure sensor and argues that any real world sensor that measures pressure also measures velocity. See June 10, 2004 Office Action. Zlotos '988, however, is concerned with pressure measurements, not velocity measurements and does not disclose taking multiple pressure measurements with a metered orifice therebetween to sense the "actual" velocity.

While there is a direct correlation between velocity and the pressure differential between two points in a closed conduit conveying the air stream, taking a single pressure measurement of an air flow stream transporting fibrous insulation material does not provide such a pressure differential and does not sense the "actual" air flow stream velocity as called for in claim 1 of the present application. Even if, in some highly controlled environments where a sufficient number

of the air flow stream parameters could be controlled and the layout and elevation of the conveying conduit was fixed, it may be possible to take a single pressure measurement of an air flow stream and make a series of assumptions (including the assumption that the conveying conduit is not clogged) to thereby estimate the velocity of the air flow stream as suggested by the Examiner, this still does not render claim 1 obvious. A system for conveying fibrous insulation material for application as insulation does not provide such a highly controlled system wherein taking a single pressure measurement of the air flow stream amounts to sensing the "actual" velocity of the air flow stream.

It is further noted that the present application discloses more than one method for determining the actual velocity of the air flow stream including a method utilizing pressure measurements. However, the disclosed method employs a differential pressure transducer 96 that measures the pressure differential existing on opposite sides of metering orifice 84 to determine the actual velocity of the air flow stream, not a pressure measurement of a single location in the air flow stream as disclosed by Zlotos '988.

With regard to the Examiner's second grounds of rejection under 35 U.S.C. § 103, Gerber et al. '747 does not rectify the deficiencies of Gerber '579 and Zlotos '988 discussed above and neither Gerber '579 nor Gerber et al. '747, alone or in combination, disclose or suggest selectively introducing fibrous insulation material into an air flow stream whereby the material can be selectively conveyed for application as insulation and sensing the actual air flow stream velocity as called for in claim 1. In responding to a discussion of claim 19, the Examiner has stated that Gerber et al. '747 discloses a control of feed rate based on differential pressure (col. 6, lines 45 et seq.). The Examiner has not, however, asserted that the differential pressure transmitter 90 described thereat senses the actual air flow stream velocity. Nor does the differential pressure transmitter 90 disclosed in Gerber et al. '747 suggest sensing the actual air flow stream velocity as called for in claim 1 of the present application.

With regard to the Examiner's third grounds of rejection under 35 U.S.C. § 103, Toyota et al. '624 is not properly combinable with Gerber '579 in a manner that suggests the subject matter of claim 1. The Examiner cites Toyota et al. '624 for disclosing a metering orifice 180 and not for the proposition of measuring an actual velocity. Moreover, measurement capillary 180 is used to measure the powder flow rate, not the velocity of powder flow rate detection gas

52 transporting the powder. As explained at col. 13, lines 14-31, powder flow rate detection gas 52 has a flow rate that is controlled to a fixed value by a flow rate control means 2 so that measurement capillary 180 can be used to measure the flow rate of the powder. By maintaining the velocity of powder flow rate gas 52 constant, the pressure differential across measurement capillary can be used to accurately determine the powder flow rate. See col. 14, lines 7-12. Thus, not only is metering orifice 180 not being used to measure the velocity of the powder flow rate gas 52 which is held constant by control means 2, but the use of pressure measurements to determine the powder flow rate in this situation where the velocity of gas 52 is held constant provides a relevant example of another situation where a pressure measurement is not equivalent to sensing the actual velocity of a gas flow stream.

Moreover, the system disclosed in Toyota et al. '624 is simply not analogous art for a method of conveying fibrous insulation material for application as insulation. As described at col. 1, lines 15-21, Toyota et al. '624 is concerned with a powder feeding apparatus. Such apparatus often employ:

> conventionally known automatic control system for feeding powder by means of a gas. This system is used to correctly supply a relatively small amount, e.g., several tens to several hundred grams per minute, of an expensive powder material, to each of several to several tens of apparatuses, as in the case of a powder supply to powder coating apparatuses, thermal spraying apparatuses or the like.

Thus, not only does Toyota et al. '624 fail to suggest sensing an actual velocity of an air stream, but the type of automatic control system for feeding powder to which the disclosure of Toyota et al. '624 is directed, simply is not analogous to conveying fibrous insulation material for application as insulation which must supply sufficiently large volumes of fibrous insulation material to insulate a structure and be sufficiently mobile to enable the application of the insulation. Thus, not only does Toyota et al. '624 fail to render claim 1 obvious when combined with Gerber '579 but it is also not properly combinable with Gerber '579.

For the reasons set forth above, claim 1, and claims 3, 5-8, 17 and 18 which depend therefrom, are patentable over the references cited by the Examiner and allowance of these claims is respectfully requested.

Furthermore, it is noted that claim 9 depends from claim 1 and further calls for a

metering orifice that is provided in the air flow stream upstream of introducing the fibrous insulation material to the air flow stream, and further comprising the steps of measuring the air stream pressure downstream and upstream of the metering orifice and determining the actual air flow stream velocity by comparing the values of the downstream and upstream air flow stream pressures. This use of pressure measurements and a metering orifice is not suggested by the references cited by the Examiner. Gerber '579, Zlotos '988 and Gerber et al. '747 all fail to disclose the use of a metering orifice and the taking of pressure measurements on either side of the orifice. The Examiner has cited Toyota et al. '624 for disclosing a measurement capillary 180, however, as described at col. 14, lines 7-12, powder flow rate detection gas 52 is passed through measurement capillary 180 at a constant velocity so that the differential pressure existing on opposite sides of measurement capillary 180 can be used to determine the powder feed amount. Thus, Toyota et al. '624 also fails to disclose comparing the values of an air stream pressure on opposite sides of a metering orifice to determine the actual air flow stream velocity as called for in claim 9. Thus, claim 9 is patentable over the cited references for this reason in addition to those set forth above with reference to claim 1.

Independent claim 19 has been amended hereby to incorporate the subject matter of claim 21. The Examiner previously indicated that claim 21 was directed towards allowable subject matter, thus, it is respectfully submitted that claim 19, and claims 20 and 22-27 which depend therefrom, are in condition for allowance.

Independent claim 28, and claims 29-40, all call for a method of conveying and vacuuming fibrous insulation material that includes providing an air flow stream downstream of a blower and an air vacuum stream upstream of said blower, selectively introducing fibrous insulation material into the air flow stream thereby conveying the material for application as insulation, vacuuming fibrous insulation material with said air vacuum stream, and separating the vacuumed material from the air vacuum stream prior to said air vacuum stream entering said blower.

It is first noted that the rejection of claims 28-40 under 35 U.S.C. § 112, first and second paragraphs, is addressed above and that the November 30, 2004 Final Office Action does not assert a substantive rejection of claims 28-40 under either 35 U.S.C. § 102 or § 103. Nevertheless, it is noted that none of the references cited by the Examiner, either alone or in

combination, disclose or suggest the method called for in claim 28.

Simply put, claim 28 calls for a method wherein the air flow stream downstream of a blower has fibrous insulation material introduced therein and wherein the air vacuum stream upstream of that same blower is used to vacuum fibrous insulation material. Thus, a single blower is used both to vacuum fibrous insulation material and to convey fibrous insulation material for application. It is noted that Gerber '579 discloses a vacuuming system for fibrous insulation material while Gerber et al. '747 discloses a conveyance system for fibrous insulation material. Neither of these references, however, suggest using a single blower for powering both a vacuum system and a conveyance system. Nor has the Examiner cited any other reference that would suggest using a single blower with these two separate functions. Therefore, claims 28-40 are allowable over the references cited by the Examiner and the allowance these claims is respectfully requested.

In the event Applicant has overlooked the need for any extension of time or payment of fee, Applicant hereby petitions therefor and authorizes that any charges be made to Deposit Account No. 16-0248, Pappas Law Offices. Should the Examiner have any further questions regarding any of the foregoing, the Examiner is respectfully invited to telephone the undersigned at (260) 426-2340.

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Application No. 10/692,180
Amendment After Final under 37 C.F.R. 1.116 dated January 31, 2005
Reply to Office Action mailed November 30, 2004

Applicant respectfully requests that a timely Notice of Allowance, allowing claims 1-20 and 22-40, be issued in this application.

Respectfully submitted,

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